

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. IV.]

TUESDAY, JULY 5, 1831.

[NO. 21.]

I.

ON THE TREATMENT OF ERYSIPELAS BY NUMEROUS PUNCTURES IN THE AFFECTED PART. BY R. DOBSON, M.D., SURGEON TO THE ROYAL HOSPITAL, GREENWICH.

In a Letter to W. LAWRENCE, Esq., F.R.S.

Read to the Medico-Chirurgical Society of London, Feb. 12th, 1828.

Royal Hospital, Greenwich, Feb. 11, 1828.

"DEAR SIR,—I have been duly favored with your letter containing various queries relative to my mode of abstracting blood in cases of erysipelas, to all which I shall endeavor to reply as distinctly and concisely as possible.

"With regard to the nature of erysipelas in which I use the punctures, I answer, in all cases, whether simple, traumatic, or phlegmonous, the number of punctures I make at any one time varies according to the extent of the disease, but is rarely under ten, and seldom exceeding fifty; the depth and extent of each puncture vary also according to circumstances, being made deeper when the parts are more tumid, but more superficial when the tumefaction is not so great; from two to four-tenths of an inch may however be considered the proper answer to your inquiry. I repeat the punctures to the number and extent required, mostly twice

a day, and often in bad cases three or four times in the twenty-four hours; and in the whole course of this practice, which has been resorted to by me in several hundred cases, having adopted it more than a dozen years ago, I have never seen any bad consequence resulting from its employment. The quantity of fluid (for it is not blood alone, but blood and effused serum) which these punctures discharge, although sometimes considerable, need never create any alarm; for however freely it may flow at first, it gradually diminishes and soon spontaneously ceases. I use these punctures in every part of the scalp, or face, body, or extremities, and never more freely than about the eyelids, and I have often found a patient with both eyes closed, which by freely puncturing he has been able to open in a few minutes: and what will not be found less true, than it may appear surprising, these punctures mostly heal in a few hours, and never entail any material marks upon the patient!

"Where puncturing has been practised from the first appearance of the disease, suppuration rarely takes place, and I have observed that it always diminishes the extent of that result even in those cases which have existed for some days before it has been resorted to: but when matter does at any time form under the skin, I let it out without

delay wherever I feel it; but I think the integuments in those cases are more preserved by making several small openings, than by one large incision, and the matter is quite as well evacuated. And I am perfectly sure that before suppuration, puncturing, which can be repeated again and again as occasion may require, has every advantage over large openings, which, like punctures, cease to bleed before the disease is subdued, but which cannot like them be renewed, and are often followed by extensive ulceration.

"The adjuvants which I use with the punctures in this disease, are, in the first place, a brisk cathartic of extract of colocynth, scammony, and calomel; I then prescribe the following mixture, which, while it keeps up the free evacuation of the bowels, acts rather cordially upon the stomach.

R. Mistur. Camphor. f 3 iij.

Liq. Ammon. Acet. Tincturæ
Rhæi, aa f 3 iss. M. Suma
cochlearia quo larga Stia vel
4tâ quâque horâ.

I also employ a lotion composed as follows, viz :—

R. Liq. Ammon. Acet. Oss. Sp.
Camphor. f 3 i.
Aquæ puræ, f 3 vij. M.

which, however unchemical it may seem from the camphor and spirit being divorced, experience has proved to be both a beneficial and a comfortable application, and may be always used with the punctures without any fear of revulsion or metastasis, which have sometimes resulted from the use of cold lotions without local abstraction; and it is no uncommon practice for me to prescribe wine or even gin for my patients in this disease at this es-

tablishment, at the very time I am puncturing them twice or thrice a day!

"I feel myself called upon to state the reasons which first led me to adopt the above mode of treatment. I had long ago observed that the generality of the profession, when called upon to treat a case of erysipelas, were mostly in the habit of ordering the application of leeches to the parts affected, thereby implying their conviction, in which I fully concurred, that local abstraction was essentially necessary to the cure; and having seen great inconvenience occur, and much valuable time lost, either from the difficulty of obtaining leeches, or, when procured, of making them attach themselves where most wanted, in the winter of 1813 and 1814, when I myself was attacked with erysipelatos inflammation of the right arm, consequent upon fever, to which leeches were directed to be applied—none being to be procured either in Rochester or Chatham (where I was then employed as surgeon in the Trusty hospital ship in the Medway)—I determined upon trying the effect of puncturing my arm in various places with a lancet, which I had often thought might be beneficially substituted for leeches, whose tardy triangular perforations it appeared to me could have no advantage over simple punctures promptly made in any situation, and to any depth, extent, or number, that might be required. And the relief they afforded me was far from disappointing my expectations, though I confess that I did not derive all the benefit from them which I might have done, had less time been lost before they were recurred to, or had they then been used with the same freedom which subsequent practice has proved to

be so efficacious: suppuration, however, was happily prevented.

"The favorable result of puncturing in my own case, encouraged me to try its effects in others. I did so with great caution at first, selecting only those cases in which the disease affected the extremities alone; but acquiring confidence in it by success, I soon began to use it more generally, and for several years past I have employed puncturing, in the manner above detailed, in every case of erysipelas which has occurred to me in any part of the body; and in an extensive hospital practice my opportunities have been very numerous. But it is not to my hospital patients alone that this mode of treatment has been extended: I have employed it among women and children, and have prevented suppuration and sloughing of integuments in several, whose faces I have found perfectly hideous from the disease, and in whom I firmly believe that it would not have yielded to any other treatment. I am far from wishing to vaunt the success of my own practice, but I feel myself justified by it, in assuring the profession at large, that where erysipelas is confined to the extremities, or where it attacks the parts exterior to the cavities of the cranium, thorax, abdomen, or pelvis, the treatment above described has proved uniformly successful. And in the only two cases in which it has failed, out of several hundreds in which I have employed it, examination after death proved, in both, that the meninges of the brain were affected by the disease, to which I had reason to suspect it had extended before I had an opportunity of adopting the punctures.

"Before I resorted to this practice, I used to bleed freely in ery-

sipelas; but experience has convinced me that general bloodletting is not so beneficial in this disease as, reasoning from its utility in other inflammatory affections, one would be apt to infer; and that puncturing, whether it be to discharge a fluid already effused, or to relieve gorged and distended vessels, has greatly the advantage over general bleeding, which, by directly diminishing the natural stimulus of the heart, and probably by promoting absorption of morbid matter (which in the other mode is evacuated), tends more to debilitate the patient and to increase the danger.

"Previous to concluding this letter, it may not be unimportant for me to add, that I do not confine the practice of puncturing to cases of erysipelas alone, having long been in the daily habit of using it in every other inflammatory state of the skin requiring local abstraction; and I find it so exceedingly useful in the vicinity of old and irritable ulcers, that I have not had occasion to amputate a limb for ulcer of any description since I have had recourse to this mode of treatment, though it will be readily credited that we receive a great number of very bad ulcers in this institution, where thousands of men who have been maimed in the naval service are provided with an asylum.

"I remain, dear sir, your most obedient servant,

"R. DOBSON."

II.

PHTHISIS—BENEFICIAL EFFECTS FROM INHALING CHLORINE.

THE following extracts from one of Dr. Elliotson's recent clinical lectures will be found interesting.

I have now used the inhalation of iodine in several cases, but I cannot say that in one it has yet effected a cure. I have used it in three cases, where there was decided excavation of the lungs, and this was one, and in all three death has taken place, I should think, much about the time it would otherwise have done. These were cases of excavation of the lungs; but whether it would cure the disease before excavation has taken place, I cannot, of course, pretend to say. I confess I have very great doubts on the subject; and when any person tells me that he has ascertained the existence of tubercles in the lungs, and found them disappear under the use of iodine or any other medicine, I must be well satisfied that that person is a *very excellent* auscultator, before I can give credit to his assertion. I do not think many people are able to say in general with certainty that tubercles exist in a solid state, without excavation, and that, after a time, these tubercles disappear. I should very much doubt any observations of my own on such a matter, notwithstanding I have carefully attended to auscultation now for several years; because you cannot satisfactorily ascertain the existence of tubercles unless they are very numerous and aggregated so as to render one spot of the lungs solid. I have frequently found tubercles in the lungs after death, where no sign of them whatever was given during life. Where, however, they are aggregated, so as to form a mass, there, of course, on striking externally, you will find a dead sound, and there will be less respiration there than natural, or none at all. But persons ought to be exquisitely nice auscultators to be able to declare the existence of

tubercles with certainty, unless the deposition is considerable. We know that in chronic bronchitis, large tubes may be blocked up for a time, so that no respiratory murmur can be heard at the spot, and that afterwards these tubes will become open, and respiration be heard. I have seen respiration of a whole lung thus absolutely suspended for a whole fortnight, without any bad symptoms, and then the respiratory murmur spontaneously return. When we reflect on this, and the extreme difficulty of detecting tubercles, if not thus aggregated, before excavation has taken place, we ought not to place easy faith in the accounts which are given of tubercles having existed in the lungs and been removed. I do not presume to assert that such things have not taken place, but I confess I would rather witness them myself than believe such observations on the statements of others, unless, indeed, they were the conviction of several persons, known to be excellent auscultators; not of one or two individuals. I should doubt my own observations alone; I would not assert that tubercles had existed, and been removed, in a single case, unless several friends, on whom I could depend, confirmed my observations on the particular case, excepting, of course, instances of tubercular *masses*; and that iodine will remove them I much doubt. I would not place any reliance upon the observations of any one who declared he could ascertain all by the naked ear that others could by the stethoscope; because this instrument affords infinitely greater nicety of observation. If the plug is removed, the sounds of both the heart and respiration are greatly magnified; there are some places of the chest to which

the ear cannot be applied, as, for instance, in the axilla; and the contact of the side of the head with the chest is so much greater than that of the instrument, that adventitious rustling sound frequently obscures the observation: lastly, the stethoscope can be applied to each individual point of the chest successively, with extreme nicety and expedition. Of course, the naked ear will give great information. But the nicety of the stethoscope is altogether far greater.

I have, however, used iodine in other cases than these three, but what has been the result I do not know. Several cases I have not seen again, and others are still in progress; but I cannot say that in any of them there has been such an improvement as to make me entertain very sanguine hopes of ultimate success. At the same time it would be very wrong to discourage trials. Such attempts are in the highest degree laudable, and I have no great respect for those persons who think that the profession can never be improved, and are content with allowing their patients to die under the old-established jog-trot routine of means—well established as unsuccessful. We ought not to go on affording mere palliation when there is the slightest probability of doing real good, or of doing, in the slightest degree, more good than before, by any new means. I think it shows a very narrow mind to set one's face against attempts at improvement. I therefore give credit to all gentlemen who suggest anything new, and still more to those who make exertions to carry such things into effect; but certainly I have not found even such temporary benefit under iodine as would give me very sanguine hopes. When

there has been no evidence of anything more than membranous affection, good has accrued; and, in excavation, certainly some alleviation. But I have used chlorine with certainly very considerable alleviation. I am attending a lady at this moment, who could not bear the inhalation of iodine in the quantity of a drop of the saturated tincture to three-quarters of a pint of water; it produced irritation, and yet she is able to inhale, in the same quantity of water, twenty drops of the saturated solution of chlorine, and the effect has been such, that her cough is nearly gone, and her expectoration reduced in a very great degree. I cannot believe that she will get well; but the amelioration has been such as I never saw before under the use of narcotics, or any other means whatever. There is a patient in this hospital laboring under phthisis and other complaints, and very bad he is, who could not bear the iodine. He used the smallest quantity that can be employed, but it immediately produced uneasiness, whereas he bears chlorine very well. In him the expectoration and the cough have been so reduced, that he will hardly allow there is anything the matter with him. He says I have given him a new inside. The expectoration still exists to a certain extent, but the mitigation is such as I never saw before in phthisis, from any means whatever. I have seen several other cases, both in private and public, where there has been a great mitigation under the use of chlorine; but whether it possesses curative powers, I cannot, of course, at present say. The iodine I know very frequently irritates, and it is necessary to add the tincture of conium, or of opium, or prussic acid, or hyoscyamus, to the

solution, in order to prevent its injurious effects ; but I have not found this necessary with chlorine ; and when narcotics have been inhaled with iodine, they may often have deserved the whole credit, for I know that alone they are extremely useful.

It is a striking fact that persons who cannot bear iodine in any quantity whatever, can bear a full portion of chlorine : it is not in one case or two merely that I have observed this circumstance.

I think, as medical men, we have all been much to blame for neglecting the inhalation of various substances, though proposed and practised thirty or forty years ago ; because we make applications to the surface of the body when it is variously diseased, and to the alimentary canal, and by inhalation we can make application to the air-passages themselves, when they are diseased. Nothing is easier than to make people inhale different substances by means of warm water. Inhalation is a more difficult thing if you employ gases ; it cannot be done unless you have a large receptacle, with the substances of the exact strength that can be borne ; but by causing the patient to inhale through impregnated water, so that the air is impregnated by the substance you employ, you can in that way employ any quantity you think proper of various substances. You have simply to take a common bottle with a broad mouth, and put a bung in it, with two apertures, through which you introduce two glass tubes. One of the tubes should pass to the bottom of the fluid, to let down the air from the atmosphere, and the air then rises up the fluid to the surface, and ascends the other tube, which merely passes through the cork, not de-

scending so low as the surface of the fluid, and is breathed *from* at the opposite extremity by the patient. It is the simplest thing in the world, and can be employed without any expense.

III.

CHRONIC DISEASE OF THE LARYNX.

FROM the same source as the preceding, we derive the following history of a disease not uncommon among us. It is often mistaken for Phthisis by the inexperienced, though one of the most strongly marked of all the diseases we are called to treat.

A man was admitted on the 17th of February, with disease of this part, who had been ill four months. He was a waterman, and consequently much exposed to cold and wet. He had been ill the winter before last, but had got better in the summer,—not quite well, but better. His symptoms, at admission, were hoarseness of voice and hoarseness of cough ; for hoarseness may affect both. There was no tenderness of the larynx, but slight expectoration, which, he said, had been a little streaked with blood. Now this was all, except that he looked thin. There was no sign of disease of the lungs, and the hoarse voice and harsh cough, though unaccompanied by tenderness of the larynx, left no doubt whatever in my mind that his disease was simply a chronic affection of the larynx. I would say the same with respect to disease of the larynx that I said with respect to ulceration of the mucous membrane of the intestines. I do not believe it is possible to say with certainty whether a person has merely chro-

nic inflammation or has ulceration, or some peculiar organic disease of the larynx. I wrote at the head of the bed "*morbis laryngis*" only. I have frequently seen great hoarseness of voice and cough, and mucous or puriform expectoration, with tenderness on pressure of the larynx, and yet, on opening the body, I have found no ulceration. Sometimes I have found thickening—sometimes I have found very great roughness, but without ulceration; sometimes I have found excrescences, sometimes great ulceration; but I do not know any symptoms that will enable one to say with certainty which of these various states exist; unless, indeed, you see ulceration on looking into the throat. If there be a hissing noise in the voice and respiration, you may conclude that the passage is narrowed; but then I do not think you can say whether there are excrescences or merely great thickening of the affected part, or what is the cause of the narrowness.

Now if there be anything more than common chronic or syphilitic inflammation or ulceration, I do not think you can do good in these cases. It is right always, except in syphilitic cases, to *begin* by treating these cases as if there were simple inflammation or simple ulceration. Indeed the only difference between the treatment of common inflammation and syphilitic in these cases, would be that (unless where much inflammation was present) in the latter mercury alone would be trusted to; and, in all simple cases, leeches to the larynx every other day, and ten grains of blue pill twice a day. I did not see any reason for supposing there was anything syphilitic in the case, and he said that he had never had syphilis in his life; but in chronic

inflammation of these parts, as of so many others, I know mercury is an excellent medicine. I have tried balsam of copaiba, and various other things, but they have been very unsatisfactory in my experience. I ordered him likewise, in case there should be ulceration, to inhale some chlorine; but I do not know whether it was ever put into practice, for all at once, while he was sitting up at breakfast, as well as usual, he was seized with a difficulty of breathing, fell back in bed, his respiration became very croupy, and he never spoke again. It occurred before I arrived at the hospital, and I see he was ordered a mustard poultice to the neck, and, as soon as it had drawn, a blister, and half a drachm of spiritus ammoniæ compositus in camphor mixture. He lived, I understand, about two or three hours, and then expired, without having spoken after the commencement of the attack. This is an event that continually occurs in the slightest disease of the larynx. I had two patients in this hospital, who had only a slight sore throat, within these two years, which attracted no attention; but in a moment they fell back—one died before anything could be done, and the other died in a few hours, before I saw her. In all diseases of the larynx, from the most violent down to the *slightest* inflammation, there is this danger; the patient is in constant danger of spasmodic asphyxia. The parts are so irritable by nature that they are easily thrown into a violent spasm, and the glottis is shut immediately, so that a patient may die as if a ligature had been passed round, and he had been hanged. In other cases, however, respiration is only greatly impeded; and such was the case in this man. The

same occurrence happened to a patient of mine two years ago, when one of my colleagues was passing round with his dresser; the man suddenly fell back in bed. He was here for a very different complaint, and had nothing but a slight sore throat, for which I had ordered six leeches, but it so happened that the inflammation inclined a little towards the larynx, and spasm of it was accidentally excited; and he died while all the parties were in the ward. I was not there at the time. There was nothing found after death but the very slightest inflammation just about the glottis.

Now in the instance before us there was considerable disease of the larynx, as I will show you; quite sufficient to account for all the symptoms. Here was, in the first place, thickening of the whole epiglottis. The mucous membrane and the cellular membrane underneath are in a state of considerable hypertrophy, also, at the glottis; and you observe an excessive growth in one spot, at the left side of the opening, an excrescence almost like fat in appearance. Then within you will find hypertrophy of the same structures. The left side of the interior of the larynx you see is very much thickened, and within the corresponding sacculus a deep ulceration exists, so that the cartilage grates under a probe introduced into it, like a carious bone. The perichondrium is gone. If in this man, at the moment of sudden dyspnœa, an opening had been made below those parts which were in a state of irritation and spasm, he would have survived that *one* attack: but with such disease of the larynx he, of course, would ultimately have died.

IV.

IDENTITY OF THE NERVOUS AND
ELECTRIC FLUIDS. BY DR.
DAVID.*

*Extract from an Inaugural Thesis,
Paris, 1830.*

M. DAVID, having been long struck with the numerous analogies which had been detected between the phenomena of electricity and the nervous power, instituted a series of experiments upon this very interesting question; and the results very strongly confirm those which Dr. Beraudi made, and which we published. We take the following extract from the Archives Générales.

In September, 1829, M. David exposed the nerves of the thigh of a chicken. He then divided them, and introduced into the neurilema a small brass wire, proportioned to the size of the nerve: the wire was made to touch the nervous pulp. Having then placed, near the opposite end of the metallic thread, a small needle, the latter exhibited very manifest oscillations. These oscillations appeared to M. David to be in proportion to the movements of the animal; so that they were much greater when the motions of the animal were more powerful. At some moments the oscillations of the needle were not manifest, and it was found that then the wire was not in immediate contact with the nervous pulp.

M. David repeated this experiment several times upon the largest nerves, and he frequently found the extremity of the needle describe an arc of four or five lines, and even more. If he forced the animal to struggle, at the same time that he held the extremity of the

* From the Lond. Med. and Phys. Journ.

wire at a greater or lesser distance from the needle, he could evidently prolong the oscillations of the latter.

These experiments were too imperfect to convince M. D. that the nerves transmitted an electric current. The effects might possibly arise from an involuntary shock produced by the wire against so moveable an apparatus : and, again, if the oscillation of the needle did really depend upon an electric current, the latter might be the result of oxydation of the metal. To avoid these probable sources of error, M. D. afterwards experimented with the multiplier of Schweiger and threads of platina : the results were still the same.

The sciatic nerve of a rabbit was insulated and laid bare, and carefully sponged ; a piece of glass was gently introduced between the nerves and muscles, while the leg of the animal was bent. The sensibility of the nerve was shown by the motions of the animal during the introduction of the needles, the one above the other, but not touching each other. They were placed in communication with the galvanometer: the animal was quite tranquil, and the needle of the multiplier was at rest. By a sudden movement of the rabbit, the apparatus was deranged, but the needle clearly deviated and moved. The needles were again introduced ; some muscular contractions succeeded ; again the needle oscillated, but so slightly as not to convince the assistants. The animal, however, soon made some very vigorous and repeated exertions, and there was no longer any doubt of the fact, for the needle now described an arc of more than two lines. The oscillations ceased with the motions of the animal, and again appeared when it moved. The

animal was excited to make contractile efforts, by stimulating the nostril or irritating the nerve, and the needle immediately oscillated, and the arc it described was great in proportion to the energy of the muscular exertions which were provoked. The phenomena could, in fact, be caused at will. With four needles, double the effect could be produced than when two only were employed. In general, the intensity of the phenomena diminished with the vigor of the animal, and they were not observable after death. When two needles were placed in a nerve, and two in a muscle, the oscillations were barely perceptible. When all four were introduced into a muscle, M. David could obtain no deviation of the galvanometric needle.

Other experiments demonstrated the reason why, sometimes, the phenomena may not arise when needles were placed in a nerve. The causes of the non-occurrence of the phenomena may be either, 1st, insensibility of the nerve from its being strained, or pressed upon, in sponging it ; 2d, its too great tension over the glass placed beneath ; 3d, blood may cover both the nerve and needles ; 4th, the perfect dryness of the nerve produced by the sponge. It is then necessary to place the nerve for a moment in contact with the muscles, and its power is restored. It is highly important that the needles and the extremities of the threads of the galvanometer should be perfectly clean.

M. David considers these experiments sufficient, 1st, to prove that organized beings have a special apparatus, which is destined to furnish an electric current ; and, 2d, to show the circumstances which are required for its production. Nee-

dles implanted in a nerve which is completely separated from the spinal marrow, produce no motion in the magnetic needle : but if a nerve is experimented upon *above* the part where it has been divided from the nervous centre, an electric current will be produced, which will cause the needle to deviate. When the spinal marrow is divided between the occiput and the first cervical vertebra, none of the nerves will give rise to any electric phenomena. Among some sufficiently obvious inferences that M. David draws from his experiments, he observes, that muscular contraction is not produced by an inherent force in the muscular fibre, either irritability or contractility, which are purely imaginary faculties, but by the electric currents furnished by the nervous branches which the muscles receive.

MEDICAL JOURNAL.

BOSTON, JULY 5, 1831.

RURAL CEMETERY.

THE practice of burying the dead in cities, and especially under churches, is without doubt at enmity with good taste, ancient custom, and, *we* believe, sound philosophy. It is therefore with great pleasure we find the subject of a rural cemetery in this vicinity, taken up with so much spirit by the Mass. Horticultural Society. The spot which has been selected for this purpose, is that so well known, in Cambridge, by the name of *Sweet Auburn*—unquestionably the most delightful and picturesque spot within ten miles of Boston, and from its peculiarly varied surface and luxuriant forests, per-

fectly well adapted to this interesting purpose. Part of this tract of land is to be used for a garden of experiment, and as it contains about seventy-two acres, this very happy association may be effected without inconvenience. We present below a few extracts from the report on this subject read to the Horticultural Society at their last meeting. These extracts are taken from different parts of the report, every line of which bears strong evidence of the source from which it came. The literary productions of the learned President are no more to be mistaken than the fruit of the native vine, or the flower of the southern clime which he has labored so zealously and so successfully to cultivate and improve.

“ With the EXPERIMENTAL GARDEN, it is recommended to unite a RURAL CEMETERY; for the period is not distant, when all the burial grounds within the city will be closed, and others must be formed in the country,—the primitive and only proper location. There the dead may repose undisturbed, through countless ages. There can be formed a public place of sepulchre, where monuments can be erected to our illustrious men, whose remains, thus far, have, unfortunately, been consigned to obscure and isolated tombs, instead of being collected within one common depository, where their great deeds might be perpetuated and their memories cherished by succeeding generations. Though dead, they would be eternal admonitors to the living,—teaching them the way which leads to national glory and individual renown.

“ Such rural burial places were common among the ancients, who allowed no grave-yards within their cities. The Potter's Field was without the walls of Jerusalem, and

in the Twelve Tables, it was prescribed 'that the dead should neither be buried nor burned in the city' of Rome. Evelyn states, 'that the custom of burying in churches and near about them, especially in great cities, is a novel presumption, indecent, sordid, and very prejudicial to health; it was not done among the Christians in the primitive ages;' was forbidden by the Emperors, Gratian, Valentian and Theodosius, and never sanctioned until the time of Gregory the Great. The Eastern Christians do not now inter the dead within their churches. During the age of the patriarchs, groves were selected as places of sepulture. When Sarah died, Abraham purchased 'the field of Ephron, in Machpelah, with all the trees that were therein and the borders round about, as a burying place,' and there he buried his wife; 'and there they buried Abraham, Isaac, Rebekah and Leah;' and when Jacob had blessed his sons, 'he said unto them, I am to be gathered unto my people: bury me with my fathers in the cave that is in the field of Ephron.' Deborah 'was buried beneath Beth-el, under an oak,' and the valiant men of Jabesh-gilead removed the bodies of Saul and his sons from the wall of Bethshon, and 'buried them under a tree.' Moses was buried in 'a valley in the land of Moab;' Joseph in 'a parcel of ground in Shechem;' Eleazer, the son of Aaron, 'in a hill that pertained to Phinehas,' and Manasseh with Amon 'in the garden of Uzza.'

"The planting of rose-trees upon graves is an ancient custom; Anacreon says that 'it protects the dead;' and Propertius indicates the usage of burying amidst roses.

"Plato sanctioned the planting of trees over sepulchres, and the tomb of Ariadne was in the Arethusian Grove of Crete. The Catacombs of Thebes were excavated in the gorges of the forest-clad hills, on the opposite bank of the Nile, and those

of Memphis were beyond the lake Acherusia, from whence the Grecian mythologists derived their fabulous accounts of the Elysian fields. There it was supposed the souls of the virtuous and illustrious retired after death, and roamed through bowers, forever green, and over meadows spangled with flowers, and refreshed by perennial streams. In the mountains near Jerusalem were located the tombs of the opulent Israelites; and in a Garden, near the base of Calvary, had Joseph, the Aramaean, prepared that memorable sepulchre in which was laid the crucified Messiah. The Greeks and Romans often selected the secluded recesses of wooded heights and vales, as favorite places of interment, or the borders of the great public high ways, where elegant monuments were erected, and surrounded with Cypress and other ever-verdant trees. Many of the richly-sculptured sarcophagi and magnificent tombs, reared by the once polished nations of Asia Minor, are still to be seen in the vicinity of the numerous ruined cities, on the deserted coast of Karamania.

"The Athenians allowed no burials within the city. The illustrious men, who had either died in the service of their country, or were thought deserving of the most distinguished honors, were buried in the Ceramicius,—an extensive public cemetery on the road to Thria. Tombs and statues were erected to their memory, on which were recounted their praises and exploits; and to render them familiar to all, to animate every citizen to virtue and to glory, and to excite in youthful minds an ardent desire of imitating those celebrated worthies, the spacious grounds were embellished with trees and made a public promenade. Within the Ceramicius, was the Academy where Plato and the great men who followed him met their disciples and held assemblies for philosophical conference and instruction. Connected

with the Academy was a Gymnasium and a garden, which was adorned with delightful covered walks, and refreshed by the waters of the Cephissus, which flowed, under the shade of the plain and various other trees, through its western borders. At the entrance and within the area of the garden, were temples, altars, and statues of the gods.

"The bodies of the Athenians, who had fallen in battle, were collected by their countrymen, and after they were consumed on the funeral pile, their bones were carried to Athens; there they were exposed, in cypress coffins, under a large tent, for three days, that the relations might perform those libations, which affection and religion enjoined; then they were placed on as many cars as there were tribes, and the procession proceeded slowly through the city, to the Ceramicus, where funeral games were exhibited, and an orator, publicly appointed for the occasion, pronounced an eulogium.

"Even the Turks, who are so opposed to the cultivation of the fine arts, embellish their grave-yards with evergreens. With them it is a religious duty, to plant trees around the graves of their kindred, and the burying ground of Scutari is one of the most interesting objects in the environs of Constantinople. Situated in the rear of the town, and extending along the declivity of the Asiatic shore, towards the sea of Marmora, it presents a vast forest of majestic trees; and thither the inhabitants of the imperial city generally resort, during the sultry months of summer, to enjoy the cool breezes which descend from the Euxine, or are wafted over the waves of the Propontis. Throughout Italy, France and England, there are many cemeteries which are ornamented with forest trees and flowering shrubs. Pere la Chaise, in the environs of Paris, has been admired and celebrated by every traveller who has visited that beautiful garden of the dead.

"In Liverpool, a similar burying ground was completed three years since, and a meeting has recently been held in London for forming one, in the vicinity of that city, of a size, and on a scale of magnificence, which shall quadrate with the wealth and vast extent of the mighty capital of a great nation. Within the central area are to be exact models of the superb temples, triumphal arches, columns, and public monuments, of Greece and Rome, as receptacles or memorials of the departed worthies of the empire.

"In a Rural Cemetery the names and virtues of the departed would live in perpetual freshness, and their souls seem to commune with those who come to do honor to their manes. Thus would all like to repose in death; and who would not deem it a blessing, to be able to confer that favor on a parent, child, wife, husband, or friend? How can this object be so successfully accomplished as in connexion with an Experimental Garden? That part of the land which has been recommended for a CEMETERY, may be circumvallated by a spacious avenue, bordered by trees, shrubbery and perennial flowers; rather as a line of demarcation, than of disconnection; for the ornamental grounds of the GARDEN should be apparently blended with those of the Cemetery, and the walks of each so intercommunicate, as to afford an uninterrupted range over both, as one common domain.

"Among the hills, glades and dales, which are now covered with evergreen, and deciduous trees and shrubs, may be selected sites for isolated graves, and tombs, and these being surmounted with columns, obelisks, and other appropriate monuments of granite and marble, may be rendered interesting specimens of art; they will also vary and embellish the scenery, embraced within the scope of the numerous sinuous avenues, which may be felicitously

opened, in all directions, and to a vast extent from the diversified and picturesque features which the topography of the tract of land presents.

"Besides the great public advantages which will result from the Horticultural departments, that portion of the land which may be consecrated to the dead, and rendered, like the Elysian fields of the Egyptians, a holy and pleasant resort for the living,—the whole will present one of the most instructive, magnificent, and pleasant promenades in our country. From its immediate proximity to the Capital of the State, it will attract universal interest, and become a place of healthful, refreshing and agreeable resort, from early spring until the close of autumn."

MEDICINAL VIRTUES OF IODINE.

THE reputation of iodine in glandular affections has been various with different practitioners. Some have found it *invariably* capable of reducing glandular tumors, whilst others, equally skilful, have been disappointed in the effects of its administration. We are at a loss to account for this diversity, and are convinced that the question of its *true powers* over disease, must be settled, if settled at all, by a succession of such candid and extensive trials as it has received in the hands of Dr. Bardsley.

In *Bronchocoele*, it is stated by Dr. Gairdner that iodine "seldom fails of effecting a complete cure, and when it does, it almost always reduces the swelling very considerably." The experience of Dr. B. has been different. Of 30 cases which he has given us, a cure was effected in 9 only. Of the remainder, 6 were relieved, and 15 derived no benefit.

In *Tubercular Phthisis*, it unhappily failed totally, like every other medicine which has been opposed to that obstinate malady.

In *Paralysis*, it received a very thorough trial,—either general or local bleeding, purging, and a restricted diet, having been adopted previously to commencing with iodine. Seven well-marked cases of hemiplegia, and 4 of paraplegia, were selected for the trial of this medicine, not because they were particularly obstinate or severe, but as best suited to give it a fair chance. In all of them it was unsuccessful, whilst other remedies, subsequently employed, produced considerable amendment in several.

In *Chorea*, Dr. B. has derived benefit from iodine in two cases, and in no others. It will be recollected that in this disease and in paralysis, the same medicine was "almost uniformly successful" in the practice of Dr. Manson, whose standing and character justly entitle his representations to implicit confidence; and it is not easy to account for the different results in the practice of two so able and disinterested observers.

Whilst administering iodine in this disease, Dr. B. remarked that several young females who took it liberally, were affected with retention of the catamenia; and considering the known effects of the medicine in reducing the size of the mammæ, he suggests that it may possibly exert an influence upon the uterus in retarding the development of its usual function.

The only diseases in which Dr. B. has been able to speak favorably of iodine, are scrofula, and ascites

depending upon *supposed* enlargement of the liver, or steatomatous tumors in the abdomen. In the former, he esteems it of equal if not superior efficacy to any other article in the materia medica; in the latter, he accords to it unusual power. Five cases of this disease are related, all which were conducted to a favorable issue under the influence of iodine. The following will illustrate the nature of these cases, and the preparations of the medicine which were used in all the trials made by Dr. B.

Edward Placy, 40 years of age, applied to me about the end of August, 1826.

He had occasionally suffered from pain in the right hypochondrium, for about eight months, with a gradual loss of appetite and strength. His complexion was sallow, pulse feeble, and thirst urgent. Considerable effusion had taken place in the abdomen. He had formerly indulged to excess in the use of spirits. After the application of a few leeches and a blister to the hypochondrium, which succeeded in removing the pain, I prescribed ten drops of the solution of hydriodate of potass (thirty grains of the salt to an ounce of distilled water), three times a day. After the blistered surface had healed, half a drachm of an ointment, composed of two scruples of the hydriodate to an ounce of axunge, was directed to be well rubbed in over the right lobe of the liver, night and morning. In the course of six weeks, an evident amendment occurred, the urine became more copious, the thirst less troublesome, and the patient's strength improved. The dose of the solution was gradually increased to twenty drops, three times a day; and friction with the ointment was at the same time continued. At the end of three months, Placy was discharg-

ed cured, without having experienced any unpleasant symptoms from the use of the iodine.

HYDROPHOBIA.

THERE is no circumstance more mysterious about this singular disease, than the uncertainty of the period which elapses between the bite and the first symptoms. While in some cases the effect seems almost immediate, and in most is manifested within a few weeks, there are instances, as we stated the last week, in which it has been delayed for months, and some are related, on good authority, in which many years elapsed between the bite and the commencement of the disease. There is a case related by Dr. Bardsley, and referred to by Dr. Good, in which hydrophobia made its appearance twelve years after the bite of a dog supposed to be mad. In cases like this, it is scarce possible to believe that so long a period is required for the regular development of the symptoms. The most plausible explanation seems to be, that the system is left in a state which predisposes to hydrophobia, and that the appearance of the symptoms immediately depends upon some accidental cause. In the case above referred to, the patient is said to have labored under nervous irritation before the hydrophobia manifested itself; and though this may be regarded either as the cause or the effect, it seems most philosophical to view it as the former. In the case which recently occurred at New York, the child was bitten on the 13th of April, and the symptoms appeared the 16th of

June; an interval of nine weeks, which is rather more than the average period, and was no doubt a sufficient interval, in this instance, to encourage the hope that the period of danger had passed, and that no infection had in fact occurred. We see by the account, that two other children were bitten at the same time, whose fate, therefore, must still form to their friends a subject of anxious and fearful contemplation.

MECHANISM OF VOMITING.

UNTIL within a few years, physiologists were content to take it for granted, that the stomach contracted upon and expelled its contents by its own muscular power. More recently, this doctrine has been seriously called in question. Some years since, Magendie performed an experiment which seemed not only to refute the idea of the sole agency of the stomach in this process, but to make it doubtful whether it had any agency whatever. This consisted in substituting a bladder for the stomach of a dog, and then introducing an emetic substance into the veins. When a sufficient time has elapsed for the absorption of the emetic, the animal contracted its abdominal muscles with so much force as to expel the contents of the bladder through the mouth. This experiment was of course considered merely conclusive of the point that vomiting is produced not by the voluntary contraction of the stomach, but by the diminution of its capacity consequent on the contraction of the muscles of the abdomen. Unfortunately for this theory, an observation

has recently been made at the Dublin Hospital, which leads to a conclusion directly opposite. In the post-mortem examination of a patient at that Institution, it was found that the œsophagus, after passing through the diaphragm into the abdomen, returned into the chest, and that the stomach was actually situated above this muscle, in the left side of the thorax. This man had vomited several times during life; which action, as the influence of the abdominal muscles was evidently out of the question, would appear to have been produced by the sole contraction of the stomach itself. Dr. Marshall Hall undertakes to reconcile these seemingly discordant facts by advertising to a theory which he advanced in 1828, and which was communicated, at that time, to the London Medical Gazette. He supposes the action of vomiting to be produced by the expiratory muscles acting when the lungs are distended, the larynx being closed so as to prevent the escape of the air, the diaphragm being relaxed, and the whole force of the muscular action being expended upon the stomach. According to this view of the subject, he observes, it is a matter of indifference whether the stomach be above or below the diaphragm, as the thorax and abdomen become to all intents a single cavity. Without enlarging upon this theory, which, however ingenious, seems open to some serious objections, we shall content ourselves with suggesting what seems to us a simpler mode of reconciling the apparent inconsistencies of the facts above stated. We conceive,

then, that the stomach is capable of executing the act of vomiting without any extraneous assistance; but that when this act takes place, the abdominal muscles are brought into sympathetic action, and thus lend their aid. In the first case mentioned, therefore, it would appear that this sympathetic action was excited at the same moment that the contraction of the stomach would have taken place, provided the organ had remained; and, in the second, that the stomach contracting as usual, though unaided by the other muscles, had the force to expel its contents. We are much tempted to add, as a general inference from all this, the utility of these experiments on living animals for settling disputed points on human physiology. Such an assertion is and must be incapable of direct proof; but we appeal to the judgment of those who have studied physiology by this means, how small a portion of the experiments which have been prac-

tised furnish any definite conclusion, and how much smaller the number of those which have led to the undisputed establishment of any general principle. If this be so, much time and labor have been thrown away, and much useless cruelty committed. Whether, on the whole, the returns have equalled the outlay, we shall not assume the province of deciding.

New Hospital.—The Legislature of this Commonwealth have appropriated seven thousand dollars, nem. con., to the erection of a new rough stone building at Rainsford Island, for the purpose of a Smallpox Hospital. It is to be erected under the direction of the Mayor and Aldermen of this city, and commenced and completed without delay.

Whole number of deaths in Boston the week ending June 24th, 21. Males, 7—Females, 14.

Of consumption, 6—dropsy on the brain, 1 lung fever, 1—unknown, 2—intemperance, 2—infantile, 1—drowned, 1—old age, 2—cholera infantum, 1—inflammation in the bowels, 1—scarlet fever, 1—throat distemper, 1—fits, 1.

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THE BOSTON MEDICAL AND SURGICAL JOURNAL

IS PRINTED AND PUBLISHED EVERY TUESDAY, BY CLAPP AND HULL, At 184 Washington St. corner of Franklin St., to whom all communications must be addressed, POST PAID. It is also published in Monthly Parts, on the 1st of each month, each Part containing the numbers of the preceding month, stitched in a cover. Price \$3.00 per annum in advance, \$3.50 if not paid within three months, and \$4.00 if not paid within the year. Postage the same as for a newspaper.